CUBIT Capability Proposal

Technical Area Technical Lead

(Geometry, Meshing, Infrastructure, GUI, Graphics, etc	Cubit Developer in charge of technical area
]	Infrastructure-Graphics	Clinton

MRD Description

Describe the capability in terms of how a user would see it.

Including software rendering for those running CUBIT without GLX.

SRS Description

What needs to be done by Cubit developers to implement this capability? Break the tasks into steps if applicable. (Steps should be on the order of 2 man-weeks or more)

Use Mesa to implement software rendering in CUBIT. All OpenGL calls need to be wrapped in subclasses. And Mesa calls wrapped in their own subclasses as well. Then at runtime, use which ever subclass is desired.

Justification

Describe why this is important and what impact it will have if it is implemented. (or not implemented).

Some people use Exceed, or other methods of connecting to a Unix box. They implement an X11 server, but may not implement GLX on the server. So they cannot run CUBIT, except to find another way to use/connect to the Unix machine.

This could also be a workaround for those with buggy video drivers.

Resources	Time estimate	Targeted Release
Who will work on this	How much time will it take in man-	10.2 (August 06), 10.3 (March 2007), 10.4
	weeks	(August 2007), Future (beyond FY07)
Clinton	2 weeks	10.2

Submitted By:	Date:
Clinton	3/29/06